STATE AUTOMATION SYSTEMS STUDY

SITE VISIT: JULY 7 - 9, 1993

COLORADO STATE REPORT

OCTOBER 5, 1994

FINAL

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THE ORKAND CORPORATION

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STATE PROFILE

System Name:	Colorado Automated Food Stamp System (CAFSS)
Start Date:	1982
Completion Date:	1987 (all counties except Pueblo) 1993 (Pueblo County)
Contractor:	In-house
Transfer From:	New Mexico
Cost:	
Actual:	N/A
Projected:	N/A
FSP Share:	N/A
FSP %:	N/A
Number of Users:	800 (estimated)
Basic Architecture:	
Mainframe:	Hitachi GX8420
Workstations:	IBM 3270
Telecommunications Network:	IBM 8100 minicomputers, 56 KB circuits, multi-drop lines (upgrade planned summer 1994)
System Profile:	
Programs:	Food Stamp

1.0 STATE OPERATING ENVIRONMENT

The Colorado Department of Social Services (CDSS) is the State agency responsible for the administration of the Food Stamp Program (FSP). FSP is State-supervised and county-operated in Colorado. In 1983, CDSS transferred the New Mexico Automated Food Stamp System (which had been transferred by New Mexico from Louisiana). Over the years, CDSS enhanced this system, referred to as the Colorado Automated Food Stamp System (CAFSS), with Income and Eligibility Verification System (IEVS), notices, and other improvements.

Within CDSS, FSP is located in the Office of Self-Sufficiency. Other programs within the Office of Self-Sufficiency include Aid to Families with Dependent Children (AFDC), Family and Children's Medicaid Eligibility, the Low Income Energy Assistance Program (LEAP), Child Support Enforcement, Work Programs, and Evaluation. Because CAFSS supports FSP only, there is an Automation Group within FSP responsible for CAFSS operations and maintenance.

Information Resources Management (IRM) is at the same level as the Office of Self-Sufficiency and reports to the executive director of CDSS. IRM staff are responsible for all of the systems supporting CDSS programs and for State operations.

CAFSS is operated on a mainframe computer at the General Government Computer Center (GGCC) and a telecommunications network that reaches all counties. GGCC is located within the Department of Administration and provides computer support to all State agencies. In May 1992, FSP served 103,349 households and 262,833 individuals. This amounts to approximately eight percent of Colorado's population.

Colorado's unemployment rate has been relatively stable in recent years. In 1987, the unemployment rate was at a ten-year high of 7.7 percent. Unemployment decreased each year between 1988 and 1990, reaching a 1990 rate of 4.9 percent, before rising slightly to 5.0 percent in 1991.

The October 1992 version of *The Fiscal Survey of States* provides the following information compiled by the National Association of State Budget Officers:

- Colorado's nominal expenditure growth for Fiscal Year (FY) 1993 was between 5.0 and 9.9 percent; the national average for expenditure growth was 2.4 percent.

- Colorado increased personal income tax revenue by $50 million in 1993.

- The regional outlook indicated that economic growth is strong in the Rocky Mountain region. The regional weighted unemployment rate of 6.3 percent was lower than the national average of 7.8 percent. The per capita regional personal income increase of 3.6 percent was greater than the national average of 2.4 percent.

2.0   FOOD STAMP PROGRAM OPERATIONS

The Food Stamp Program is administered at the county level by county staff with a county director hired and appointed by county commissioners. County staff are hired and supervised by county-level staff. State-level staff allocate resources to the county level and supervise the administration of the various programs. Counties that do not comply with State policy may not receive funding for the Federal and State cost sharing portions of these respective programs.

Within FSP, the supervisor of Automation is responsible for CAFSS operations and maintenance. The Automation Group is supported by two automation specialists and administrative support. Through a matrix management approach, the supervisor of Automation directs seven full-time IRM staff responsible for maintaining the application software used by CAFSS.

IRM support of CAFSS is unusual in that the IRM staff are physically situated with FSP staff and are directed by a FSP supervisor.

The FSP Automation supervisor is also project manager for the Colorado Benefits Management System (CBMS) Project which is currently in the planning stage. CBMS would include FSP, AFDC, and Medicaid eligibility.

2.1   Food Stamp Program Participation

As shown in Table 2.1 below, average monthly FSP participation increased nearly 29 percent between 1988 and 1992. The largest increases have occurred since 1990, with a 10.7 percent increase in 1991 and 8.5 percent in 1993. In addition, in May 1993, there were 103,841 FSP households.

Table 2.1 Average Monthly Public Assistance Participation

PROGRAM	1992	1991	1990	1989	1988
AFDC Cases	N/A	34,489	34,779	33,580	32,609
Foster Care	N/A	N/A	N/A	N/A	N/A
GA	N/A	N/A	N/A	N/A	N/A
FSP Households Individuals	103,349 262,833	94,921 242,171	85,861 218,736	82,785 211,720	80,262 209,288
Medicaid	N/A	181,706	157,708	152,926	148,479

2.2 FSP Benefits Issued Versus FSP Administrative Costs

The ratio of benefits issued to FSP administrative costs has improved from 14.6:1 in 1988 to 19.6:1 in 1992. Colorado's average monthly benefit issuance per household over the last five years, as provided in Table 2.2, has increased.[1]

Table 2.2 FSP Benefits Issued

	1992	1991	1990	1989	1988
Average Monthly Benefit Per Household	$178.78	$164.28	$149.16	$134.77	$135.45

2.3 FSP Administrative Costs

Colorado's FSP administrative costs for the past five years are provided in Table 2.3.[2] The data indicates that total administrative costs increased each year from 1988 to 1992. It also shows that the average cost per household fluctuated in this time period.

Table 2.3 FSP Federal Administrative Costs

	1992	1991	1990	1989	1988
Total FSP Federal Admin. Cost	$11,159,574	$11,269,008	$10,707,482	$9,885,351	$8,712,422
Avg. Federal Admin. Cost Per Household Per Month	$9.12	$9.91	$10.22	$10.01	$9.30

2.4 System Impacts on Program Performance

Until CDSS began implementing CAFSS in 1982, some of the larger counties had automated systems that supported FSP, but many smaller counties had manual systems. In the early 1980s, Colorado was having difficulty complying with FSP requirements; there were high error rates and the State was under sanctions. In addition, Denver County, the county with the largest FSP population, turned over its automation responsibilities to the State. At the suggestion of the Food and Nutrition Service (FNS)

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[1] The number of households and benefit amounts use data reported in the FNS *State Activity Reports* each year.

[2] The number of households and FSP Federal administrative costs are derived from data reported in the FNS *State Activity Reports* each year.

Mountain Plains and Regional Office, Colorado examined the automated FSP system in New Mexico and transferred the entire system to Colorado in 1982. By January 1983, 53 percent of the recipients and four counties were on the new system, CAFSS. Over the course of the next two years, all but one county (Pueblo), converted to CAFSS. Pueblo County came on-line as of July 1993.

The impact of CAFSS on program performance was not immediate, since implementation occurred over a period of three years (except for Pueblo County). However, error rate sanctions have been lifted with reductions in Colorado's error rates, overpayment collections have increased with the implementation of the collections module, and the State has been able to meet most Food Stamp Program and automation requirements. Client service will be improved significantly when a single application form for AFDC, Medicaid, and FSP is implemented September 1, 1993.

2.4.1 Staffing

Colorado's 63 counties are responsible for staffing the 82 local welfare offices in the State. FSP, in implementing CAFSS, did not consider the reduction of staffing levels as a benefit. FSP does not track staffing levels within the counties or the caseloads of workers, although FSP automation staff indicated that caseload increases in recent years are a concern.

In a final cost benefit analysis prepared for the CBMS project, the 1992 caseload per direct full-time equivalent (FTE) was 299.34 and is projected to increase to 336.64 in 1995 and remain at that rate up to 2001.[3] Caseload included AFDC, Medicaid, and FSP cases.

According to the CBMS Cost Benefit Analysis, there are 1265.10 direct FTE caseworkers in Colorado. Of these, approximately 346.75 FTEs are required for FSP caseloads. Even though the Client Oriented Information Network (COIN) and CAFSS serve the public assistance (PA) population, caseworkers in the local offices may be generic workers. Offices with smaller caseloads especially may only have one caseworker. Both COIN and CAFSS utilize the same computer terminals and network, but at this time the client must complete separate applications for AFDC and FSP assistance and each application must be entered into its respective computer system. Larger offices sometimes have program-specific caseworkers, especially in Denver County, which even has a few FSP-only offices. In examining the worker caseload, therefore, it is appropriate to consider the caseload of all programs handled by the caseworker, even though CAFSS serves only FSP. In 1992, the total number of supervisory FTEs was 90, 18 of whom were allocated to the FSP.

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[3] Cost Benefit Analysis for CBMS, February 3, 1994, Deliverable No. 4, Final, Exhibit VIII-7, Page VIII-14.

2.4.2 Responsiveness to Regulatory Change

CDSS has generally been able to implement most Federal regulations in a timely manner. As indicated in Exhibit A-2.1 in Appendix A, 12 out of 14 regulations were implemented on time in Colorado. The two regulations that were not implemented on time are:

- Mickey Leland Memorial Domestic Hunger Relief Act - Excludes as income state or local GA payments to HHS provided as vendor payments.

- Mickey Leland Memorial Domestic Hunger Relief Act - Excludes from income annual school clothing allowance however paid.

Staff interviewed expressed a need for more timely notification of regulatory changes from the Federal government in order to implement changes on time. The State indicated that it received prior notification of forthcoming regulatory changes from the American Public Welfare Association instead of FNS or the regional office. The most difficult changes to make were those requiring the issuance of more than one month's benefits (combined initial allotment) since the system was based on one-month issuance.

The FSP Automation Group maintains tight control over the priorities of the FSP IRM Team and believes that this control enables them to implement regulatory changes in a timely manner. Until the IRM group was co-located with the FSP staff, the FSP staff did not feel that IRM was responsive to their needs.

The IRM staff feel that it is easier to make changes in their VSAM/CICS environment than it would be if CAFSS was developed in ADABAS/NATURAL. COIN was developed in ADABAS/NATURAL.

2.4.3 Combined Official Payment Error Rate

Based on information provided by CDSS, the payment error rates since 1986 have been below the tolerance limits for each year. As shown in Table 2.4, the actual error rate was at a high of 8.51 percent in 1988, then declined to 6.28 in 1990 and rose again slightly in 1992.

Table 2.4 Official Combined Error Rate

	1992	1991	1990	1989	1988
Combined Error Rate	7.61	6.82	6.28	7.72	8.51

2.4.4 Claims Collection

The claims collection module of CAFSS was implemented in 1987. Before this module was implemented there was no way to track FSP claims collection. Prior to 1987, the amount of FSP claims collected annually was around $250,000; after implementation this amount doubled.

Table 2.5 presents claims collection data indicating the total value of claims established and collected and the percentage of claims established that were collected. During the 1988 to 1992 period, the dollar value of claim established and claims collected increased each year. Colorado's claims collected as a percentage of claims established fluctuated over this time period but generally increased.

Colorado served as a pilot State for the Tax Intercept Program. For tax year 1991, CDSS submitted 29,563 cases to the State Tax Intercept Program and intercepted and collected on 5,308 cases, for a total of $727,534. For the Federal Tax Intercept Program, there were 5,216 FSP claim cases submitted for the Internal Revenue Service (IRS) tax year 1992. Through February 1993, $342,746 had been collected on 904 cases.

Table 2.5 Total Claims Established/Collected

	1992	1991	1990	1989	1988
Total Claims Established	$3,086,340	$2,901,405	$2,473,784	$2,535,289	$2,670,350
Total Claims Collected	$1,540,803	$1,607,320	$1,345,422	$1,103,801	$900,128
As a % of Total Claims Established	49.9%	55.4%	54.4%	43.5%	33.7%

2.4.5 Certification/Reviews

FNS conducted a post-installation review of CAFSS in November 1987. No changes had to be made in the system as a result of this review. COIN (for AFDC and Medicaid) was Family Assistance Management Information System (FAMIS) certified in December 1986.

3.0   OVERVIEW OF THE CURRENT SYSTEM

CAFSS supports only the Food Stamp Program. Through CAFSS, a worker can access IEVS which also supports AFDC and Medicaid eligibility.

The CAFSS system was transferred from New Mexico in 1982. Because the FSP is county-operated in Colorado and the large counties had existing systems, implementation occurred over a period of several years. CDSS added several major enhancements over this period: IEVS matching, claims collection tracking system, and IRS Tax Intercept. Currently, FSP notices are being enhanced.

CDSS began implementation of CAFSS in October 1982. By January 1983, it had converted 53 percent of its caseload and implemented four counties. By July 1985, it had implemented over 90 percent of its cases and all but one county. Pueblo County converted approximately 9,000 cases to CAFSS as of July 1, 1993, achieving statewide implementation. Counties are responsible for hiring and firing staff, for welfare office operations, and for the issuance of food coupons. Although CAFSS is separate from the COIN system that supports AFDC and Medicaid eligibility, as well as systems that support the Automated Child Support Enforcement System (ACSES) and child welfare, the terminals that are used for CAFSS in the field may also shared by other programs.

The FSP application is still separate from the application for Medicaid and AFDC although a single purpose application (SPA) has been designed for use by the three programs. Some offices have already begun to use SPAs for FSP cases and by September 1993 all offices will be converted to SPAs. IRM began a project to permit one point of entry for the SPA information, with COIN and CAFSS taking from the application the information needed for each system. The programming for the food stamp portion of the Benefits Eligibility Tracking System of Colorado (BETS-C) has been completed, but the project is currently on hold until AFDC/Medicaid requirements have been redefined. BETS-C will provide screen edits, pop-up help screens, and an on-line policy manual for the workers when it is completed. Until that time, however, the data entry form (FS-3B) used to input FSP data into CAFSS will continue to be utilized.

The FS-3B form is used for the initial input of client information into CAFSS as well as for each update, correction, or change. A paper form is printed and placed into the case file. The FS-3B does not parallel either the old FSP application or the new SPA, nor does the FS-3B parallel the data entry screens. Originally, FS-3B was designed to facilitate data entry by clerical staff, but since caseworkers have their own terminals and the majority input their own cases, the need for direct data entry from FS-3B has been minimized. Apparently, there are some caseworkers who enter client information into CAFSS directly from the application, whether the new or the old application is used.

The discussion below addresses system functionality, focusing on the current CAFSS, with any planned enhancements to CAFSS as appropriate; level of integration/complexity, current and planned; workstation/caseworker ratio; and current automation issues.

3.1   System Functionality

Counties are responsible for hiring and firing staff, welfare office operations, and the issuance of food coupons. Although CAFSS is separate from the COIN system which supports AFDC and Medicaid eligibility, as well as systems that support child support enforcement and child welfare, the terminals that are used for CAFSS in the field may also be shared by other programs.

Staff in smaller county offices generally must perform many functions and work with several assistance programs. In larger offices, when the caseload justifies it, staff may be more specialized. In some areas there are separate FSP offices as well, although this is the exception. The worker who is working on an FSP case signs onto the CAFSS system, but can also access portions of COIN, child support enforcement, and other databases to work the case. Currently, until September 1993, workers are required to use separate application forms for AFDC and FSP cases.

- **Registration.** An FSP applicant completes an application form and submits it to an intake worker, screener, or eligibility technician (Colorado's term for caseworker). The information is screened to determine whether the person is eligible for expedited food stamps and, if so, an interview is immediately scheduled.

  The top portion of the FS-3B data entry form is completed and the worker/screener sets up the case file and enters the person's name and Social Security number (SSN) (if known) into CAFSS. If there is no SSN, the system will assign a dummy number for the head of household only. Later, when the SSN is obtained, this record will be closed and another reopened with the SSN. Other information entered at this time includes the county code, expedited code, application date, household type, worker number, address, household size, authorized representative, and previous case number, if any. There is no difference between regular applications and expedited applications as far as the information that is entered into the system and the screens that are presented.

  Before the head of household can be registered on the system, the worker must make inquiries as to whether a person with the same name currently exists on the CAFSS master file. A person with the same name is listed as inactive in the master file; or a person with the same SSN, a dummy SSN, or pseudo number is already on the master file. If the inquiries result in no hits, the case can then be registered on the system. Inquiries on the participation of other members of the household are not conducted until the application has been certified. If the system finds an existing CAFSS record, the system will automatically copy historical records into the current record.

  Each time a case that has been registered on the system is changed, a copy of FS-3B must be printed and placed in the case file. If some action is not taken on the registered case after 60 days, the system will automatically close the case.

- *Eligibility Determination.* Client interview scheduling is manually performed for FSP applicants, although COIN has an automated approach for scheduling clients.

  During the applicant interview, the caseworker reviews and verifies information that is provided by the applicant and documented in the application form. After the interview, the worker completes the FS-3B and enters (or has a clerk enter) the information into two screens on CAFSS. The system provides immediate on-line edits during data entry and provides a check digit for the SSN. At this time, the worker enters the remaining household income and expense information. The system then determines eligibility.

- *Benefit Calculation.* After eligibility is determined, the system calculates the benefit amount. Before benefits are approved, SSNs of all household members are matched against the Colorado Department of Labor and Employment (CDLE) wage and unemployment benefit records. Information that appears on the CDLE databases which was not reported by the applicants should be resolved prior to approval of benefits. The system also requires verification of SSNs.

- *Benefit Issuance.* County offices issue food coupons either by mail or over the counter (OTC). No authorization-to-participate (ATP) cards are used in Colorado. Coupons are also issued from itinerant sites. CAFSS creates mailing labels for the counties with the coupon books/denominations and a bar code to facilitate mailing. Issuance files are created monthly for ongoing cases and daily for new approvals and special cases. Expedited issuance is possible within five days. The Colorado State legislature has recently approved cash-out of food stamp benefits in four counties, the amount will be included in the AFDC grant.

  Workers are able to enter data regarding undelivered, stolen, or returned coupons on-line. Replacements can be requested by the worker after the worker has obtained a signed affidavit. The system links the document numbers of the original and replacement issuance. All replacements require supervisory sign off on CAFSS since this component is subject to fraud.

- *Notices.* The system automatically generates client notices that approve, change, close, deny, restore, and recertify cases when an action is taken or if there is a new application or certification. The notices are printed and mailed from Denver. There are no notices that are worker generated or that require the worker to enter information, such as the certification period.

  CDSS has begun printing some notices on a new tri-fold (referred to as Z-fold) that is pasted together at the edges. The cost of forms and handling will be greatly reduced with the switch.

- **Claims System.** CAFSS has a claims subsystem that CDSS believes may be unique. It tracks the members of households with claims as well as the head of

- Beneficiary Earnings Exchange Record (BEER) provides earned income received by Social Security Administration (SSA) from IRS.

- State Data Exchange (SDX) system provides SSI benefit information.

- SSN verification or Numident checks client personal data (name, date of birth, sex if available) against SSA files to verify SSN.

- CDLE provides unemployment insurance benefits (UIB). CDSS combines 10 weeks of data.

- CDLE provides earned incomes reported by employers in two prior months.

- IRS provides unearned income included on a tax return or reported to IRS by a paying institution.

Workers access a separate IEVS matching subsystem that is a part of the COIN system. The worker can log onto COIN while still logged onto CAFSS, select IEVS Matching from the COIN main menu, and review the on-line screens. A summary of all hits is presented on one screen for each case, with detailed screens for each database hit available. The detail screens provide the information reported by the client as well as the amount reported on the database.

Workers are to verify hits on information provided by SSA on other income, wage data from CDLE, and unearned income from IRS within 45 days of receipt of the information. CAFSS provides both paper printouts on a monthly basis and on-line screens. The worker must enter the action code associated with each hit. Although Colorado refers to the matches and the on-line screen indicators as hits, the same screen, in another State, might be referred to as a "discrepancy alert" screen. The worker, however, cannot simply delete the alert (or hit), but must first enter the action code.

If any income or employment is shown in the wage, UIB, or SDX files, the worker must request verifications from the client and employer. The worker has 45 days within which to send a handwritten request to employers to verify the information. Most cases are, therefore, certified for the first month before responses can be received on inquiries made or verifications obtained.

Central office personnel reported that workers find IRS, UIB, State wages, and SDX to be good sources of information.

CAFSS tracks match resolutions with an ad hoc report that is run at the request of program staff and with the approval of a manager. It is run only once or twice a year, for Federal reporting purposes only.

- *Alerts.* CAFSS does not have worker alerts per se. As mentioned above, the discrepancy hits are a type of alert that must be handled by the caseworker. The worker also has the capability to enter in two future review dates with a type code into the initial application screen. Instead of on-line alerts, CAFSS offers a case management report that is used as a reminder.

- *Monthly Reporting.* There has been no monthly reporting in Colorado since the claims subsystem was implemented in 1989.

- *Report Generation.* Some of the major or most useful reports include:

  - Daily Issuance Report for issuance personnel.

  - COIN Interface Report. This is produced monthly by office and worker and lists each case.

  - Applications Pending Over 20 Days - Over 30 days. This report is produced on the 1st and 15th of every month. It shows applications pending over 20 days and over 30 days and is produced for each caseworker.

  - Redeterminations Due and Review for Change. This is printed by office and worker and shows cases nearing end of certification period.

  - Caseload list showing active cases for allocating staff resources.

  - Cases closed or suspended.

  - Daily Report of Notices Sent.

  - FSP Issuance Reports.

  CDSS provides 44 worker, management, Federal, and other miscellaneous case management-type reports. IEVS provides another 10 showing the results of the matching. IEVS reports are shown on-line. CDSS is working to make more reports available on screen and to eliminate some of the paper reports.

- *Program Management and Administration.* CAFSS provides neither help screens nor on-line policy manuals. Once the BETS-C enhancement project to enable single point of entry from the SPA form is completed, BETS-C will provide pop-up help screens for codes. The worker will be able to go to the help screen, move the cursor to the appropriate code, hit enter and the code will be placed into the application screen. SPA will also provide an on-line tutorial behind the application screens. The FSP portion of SPA has been completed, but AFDC is still making changes.

3.2 Level of Integration/Complexity

There is almost no integration of CAFSS with other PA systems. The IEVS matching system is the only area where there is any apparent integration. The worker must enter into COIN, then access the IEVS matching screen to select FSP IEVS matching. The development of the IEVS matching function was a combined development effort for the three assistance programs. Although a caseworker may access COIN and ACSES for resource information, there is no way to transfer from these systems to CAFSS or from CAFSS to other systems.

AFDC and Medicaid Eligibility are supported by COIN. If it is determined that CBMS is feasible, AFDC, FSP, and Medicaid will eventually be supported by one integrated system. Until that time, CAFSS and COIN will continue to operate separately.

3.3 Workstation/Caseworker Ratio

CAFSS includes 369 terminals and 91 PCs. The COIN system includes 126 PCs and 741 terminals. The caseworker to terminal ratio is approximately 1:1; some supervisory personnel and district office staff have microcomputers.

3.4 Current Automation Issues

CAFSS application enhancement and maintenance are provided by five to six full-time IRM staff who are co-located with the FSP automation team. This team was responsible for the development of the FSP-related portions of BETS-C, a front end enhancement that will capture data from the new single purpose application form. These IRM staff work on no other CDSS systems, although they report administratively to the Director of IRM Development. Other IRM staff are developing the AFDC and Medicaid related portions of BETS-C. While the issues associated with BETS-C are being resolved, FSP staff continue to maintain CAFSS and develop enhancements for CAFSS. Since CAFSS has been developed with software and file structures different from other CDSS systems, it is not clear to what extent CAFSS and its enhancements can be integrated into future systems. It is apparent, however, that FSP staff are generally satisfied with CAFSS. Although their current system technology, which is based on CICS; VSAM; and COBOL, may be considered out of date, they prefer it to an ADABAS/NATURAL technology, as used by COIN, which they think is causing response time problems for COIN.

BETS-C project management is provided by IRM. CBMS project management, at least during the planning phase, is being provided by the FSP automation supervisor. Once CBMS enters the development/implementation phase, it is expected that the project management role will shift to another group, as yet unidentified.

- **SPA/BETS-C Development**. Development of a single point of entry for the single purpose application form is on hold. The project was scheduled for implementation in January 1993, and no new date has been scheduled. According to FSP staff, all programming and components associated with FSP are completed, including pop-up help screens and the on-line policy portion of the system. On the AFDC/Medicaid side, however, requirements were changing so rapidly that IRM placed the development effort on hold until the program staff could define their requirements and lock them in. FSP has been directed by FNS to implement the single purpose application form by September 1, 1993. Without the completion of BETS-C, staff will continue to perform duplicate data entry for initial applications for the multiple programs. On the positive side, however, the number of initial applications are a small percentage of the overall caseload.

  According to FSP staff, BETS-C has grown into a significant rewrite of the COIN system. Apparently, there was not enough user involvement at the beginning; there was confusion over user requirements; and there were large scale scope changes in the course of the project.

4.0 SYSTEM DEVELOPMENT AND IMPLEMENTATION

This section discusses the status of the system that is in the planning stage -- CBMS. Colorado envisions that CBMS will be configured in multiple tiers which will support a distributive processing approach. CBMS will utilize the GGCC mainframe, Local Area Network (LAN) file servers, and personal workstations for each worker.

The GGCC mainframe will be used for the central repository of the databases. The mainframe will handle the centralized functions requiring access to all cases and individuals on the system. It will perform all batch processing, benefit generation, client periodic report processing, and report generation.

The LAN multi-processing servers will be located at major local office sites to act as a high speed multi-processor server for the workstations in one or more offices. It will contain the work-in-process for the day and act as the communications link to the mainframe for terminal emulation from the workstations. It will function as the print formatter, spooler, and controller for legal notices and other local printing.

The personal workstations will process the rules-based system. As such, it will extract cases from the LAN multi-processor server, accept data from clients, update and store all changes, and establish alerts. It will also have the capability to access data bases on the mainframe, and other systems

Colorado is using MAXIMUS to prepare the implementation Advanced Planning Document (APD) and Request for Proposals (RFP) as well as the documents required during the planning phase, such as, the alternatives analysis and cost benefit analysis. Colorado, teamed with Iowa and IBM, prototyped expert system technology for integrated eligibility determination. CBMS is a project to develop and implement this concept.

4.1 Overview of the Previous System

During the period 1982 to 1985, prior to the implementation of CAFSS, most large counties had their own automated systems and most smaller counties had none. Colorado was placed under sanctions and the county with the largest caseload, Denver, was not in compliance with FSP regulations. CDSS selected a transfer candidate from New Mexico, renamed it CAFSS, and implemented it to support county FSP operations before an APD could be prepared and approved. Previously, the New Mexico system was running under VSAM and CICS. If the State had more time, it would have preferred to transfer an ADABAS/NATURAL system. On the other hand, the technical staff are pleased with the VSAM/CICS CAFSS because they feel its response time is faster than an ADABAS system. The technical team would prefer to move to DB2 rather than ADABAS. In the March 1987 APD amendment, the State requested approval for enhancing CAFSS, including a system upgrade to NATURAL/ADABAS. This was not approved and as a result CAFSS is still in VSAM/CICS.

4.2 Justification for the New System

While CAFSS was implemented to bring Colorado into compliance with FSP regulations, the objectives of CBMS are to integrate Colorado's multiple welfare systems for the worker, implement a common application form for all PA programs, improve client service, and improve worker productivity. Specifically, CBMS is expected to result in the following improvements:

- Improve client services so that visits to multiple offices are eliminated.

- Reduce the number of specialized workers by providing automated assistance that will provide rules and regulations for the specific program area.

- Eliminate the need for multiple application forms.

- Impose consistency on the application of program policies and rules.

- Automate calculation of AFDC benefit amounts.

- Facilitate the implementation of Federal regulations through improved system architecture and tools.

- Improve computer response time for the field workers.

- Improve communications among counties and State offices through the use of E-mail.

- Improve program administration and management controls through improved reporting and office automation capabilities.

4.3   Planning and Development Activities

The timeframe for prototyping and developing CBMS is long-term. The final report on the prototype was prepared in December 1989. Since that time, Colorado prepared a Planning APD (PAPD) and an RFP for a planning contractor and contracted with MAXIMUS. Alternatives and cost benefit analyses have been prepared for CBMS. In the meantime, development continues on enhancements for CAFSS and COIN, since it is expected that CBMS will take some time to develop.

The payback period for CBMS is anticipated to be 6 years. The first three years will include the transfer, development, and implementation. In the remaining years of the payback period the CBMS would be operational. Colorado has opted to develop the distributed processing alternative which provides for flexible, open architecture in the construction of the network and the configuration of its delivery devices. It would also allow for low cost integration of new technologies, such as image processing, multi media, and integrated voice response technology. CBMS would enhance client service, increase worker productivity, and provide for consistent application of welfare policies throughout the State.

4.4   Conversion Approach

The conversion approach has not yet been determined. If CBMS is developed as a front end based expert system, little manual conversion will be necessary.

4.5   Project Management

Current project management for CBMS is under the FSP Automation Group. The interim project manager is from the program area, devotes 25 percent of her time to the project, and reports to the manager of Financial and Contract Management. A permanent Project manager had not been named at the time of the site visit. The PAPD indicated that a contract administrator would be hired to manage the development and implementation contractor.

The CBMS project will conduct all development and implementation onsite. The contractor will be responsible for these activities and own the hardware and software (which it will subsequently lease to the State). Contractor deliverables will be reviewed by project management staff, management information systems (MIS) staff, and program staff. The State will assume a primary role in quality assurance (QA), training, and conversion.

4.6 FSP Participation

During CAFSS implementation, Colorado utilized a User Committee made up of workers and supervisors from eight counties. There were four FSP staff from the Central Office, one policy person, and three FSP automation staff. The User Committee met biweekly.

For CBMS (currently in the planning stage), FSP users are defining requirements. The basic requirement is that FSP users do not lose any functionality and that existing functionality is enhanced. The CBMS user group includes one representative from Aging and Adult Services, two from IRM, and three from the Office of Self Sufficiency. During the planning phase, the project manager is the FSP automation supervisor and the project director is the manager of Financial Management and Contracts.

CBMS also has a management team comprised of the manager of IRM, the manager of Financial and Contract Management, and the manager of the Office of Self Sufficiency.

4.7 MIS Participation

For the CBMS project, current technical staff will have to be trained in new technology as part of the contract. MIS direct involvement in the project will largely be for review and managerial oversight since the contractor is to be retained 5 years for support.

4.8 Problems Encountered During Development and Implementation

The CBMS project is still in the planning phase. An APD for a system costing $30+ million over eight years was pending at the time of the site visit. Since the proposed system is complex and technically advanced, a contractor will be used for development and implementation.

5.0 TRANSFERABILITY

CAFSS was an in-house installation of a transfer of the New Mexico system (which had been developed by Louisiana in 1971). Much of the system was rewritten, such as IEVS and the reporting function, and some components, like accounts receivable and tax intercept, were added later. At the time of the transfer, GGCC Colorado had insufficient computer capacity to handle the system. The system was piloted in one county in October 1982 using New Mexico's mainframe. GGCC's own mainframe, in Denver, was up and running the system by the end of 1983. North Carolina's claims component was transferred, modified, and implemented in 1987.

The main benefit to the State of transferring an existing system is that the system has functioned previously in a similar environment with demonstrated technology, thus saving development time and providing reliability as well. The disadvantages included transferring somewhat antiquated technology, inheriting the weaknesses of an old system, and the need to customize and modify.

CBMS will be considered a transfer in concept, since it will be a variation of a distributed system. Colorado plans to develop it as a transferable system, since there are many States that would find such an application an attractive option for improving their systems.

6.0   SYSTEMS OPERATIONS

The following section provides a description of the Colorado automated system, CAFSS. The description includes a profile of system hardware and a discussion of the system operating environment.

6.1   System Profile

•	Mainframe:	Hitachi GX8420, 512 MB, 200 MIPS
•	Disk:	Hitachi 3380/3390 151 gigabytes IBM 3380 Memorex 3380 STK 3380
•	Tape:	STK 4400 cartridge silos STK 4480 cartridge units STK 4674 9-track
•	Printers:	Xerox 4050 laser, Xerox 4090 laser Memorex 4780 page, STK impact
•	Front Ends:	IBM 3745
•	Workstations:	IBM 3270
•	Telecommunications:	IBM 8100 minicomputers, 56 KB circuits, multi-drop lines (upgrade planned Summer 1994)

6.2   Description of Operating Environment

This section contains a description of the local operating environment, including maintenance, telecommunications, performance, response time and downtime. There is also a discussion of current projects and future plans.

6.2.1 Operating Environment

The State data center, GGCC, is the central computing entity for all State agencies. On-line hours are 7:00 a.m. to 6:00 p.m. Batch hours are 24 hours a day. The normal PA batch cycle is completed in four hours. The longest monthly run is eight hours. Batch processing may interfere with the on-line system if there are significant problems with the portion of the cycle that updates and then backs up files.

CDSS sets job priorities and dependencies and GGCC schedules and runs them. JCL is written by individual programmer/analysts and tested by a specified person in a test environment prior to being sent to GGCC. CDSS uses IRM standards for JCL and data names. GGCC uses the Computer Associates product CA7 for job scheduling.

GGCC personnel use several Computer Associates products to manage the data center and operate the equipment more efficiently. Among these are Easytrieve Plus for ad hoc reports and SCANDU to monitor disk utilization. FOCUS from Information Builders is also used for ad hoc reporting from VSAM and relational databases.

The tape center averages 40,000 tapes a month and utilizes 2500 mounts a day. Tape silos help manage this workload.

There is a hot site with Sungard, Inc in Philadelphia. It was tested in May 1993 and three times in 1992. MVS, TSO, and JES2 all tested out successfully. The State plans two tests per fiscal year.

6.2.2 State Operations and Maintenance

The MIS group that supports CAFSS is part of IRM, but is physically located with FSP staff and directed by an FSP supervisor. The group also works on the new system. There is one supervisor/manager, two analysts, three programmers, and one QC/test analyst supporting the system. The MIS group and FSP personnel work out priorities and testing within a normal management framework, without a change control committee. Although there are no backlogged user service requests, there are many that are in the process of being implemented. There is a county user group that has input into direction, specifications, and testing. Large programming changes are pilot tested.

QA is staffed with both FSP and IRM staff. There is no formal approach to monitoring the system except for the CICS monitor and input from the county workers. Implemented change requests are organized into groupings for release versions. This facilitates testing, training, and support.

MIS personnel use Knowledgeware's CASE products IEW/ADW for software support and new project development and modifications.

6.2.3. Telecommunications

Colorado recently upgraded its slowest communications lines to a minimum of 9600 baud. The entire communications system is under review as part of an effort to upgrade the system and replace the IBM 8100s. The system carried 23 million transactions in the past two years although much of this volume is attributable to data entry.

6.2.4 System Performance

Social services utilizes an average 28 percent of the central processing unit (CPU). However, usage peaked at 90 percent in 1992. Customer Information Control System (CICS) transactions are growing at almost 18 percent a year over the 1991 rate. The State anticipates going to an IBM 9021-820 mainframe to accommodate increased demand.

The data base is purged annually of cases that are closed and have had no activity for three years. There are currently 500,000 records on the database.

6.2.5 System Response

The State experienced some delayed response time in 1992 due to the growth of systems. This situation was partially alleviated when 151 gigabytes of direct access storage device (DASD) was procured and provided a 36 percent improvement in response time. The computer center monitors response time for the State. Response time averaged from 2 to 4 seconds, depending on the transaction, according to the transaction log.

6.2.6 System Downtime

Downtime is not a factor in Colorado.

6.2.7 Current Activities and Future Plans

Colorado has a planning APD pending. The State will need to upgrade its mainframe (CPU and DASD) to support growth and development. However, it hopes to be able to implement significant portions of the CBMS distributed processing system in time to relieve the mainframe of some of its edit and processing load and avoid a second significant upgrade caused by the PA caseload. Enhancements to CAFSS and COIN will continue since the new system is still years away.

7.0   COST AND COST ALLOCATION

This section addresses the topics of the CAFSS enhancements component development costs and level of Federal funding, projected development and operational costs for the proposed CBMS system, CAFSS operational costs, cost control systems and methods, and cost allocation methodologies for direct and allocated (indirect) costs.

7.1   CAFSS Enhancements Component Development Costs and Federal Funding

CDSS began implementing CAFSS in 1982. This system was developed as a stand-alone system to support FSP. No development costs for the initial development phase of CAFSS were available. Because of a critical situation regarding sanctions and compliance with FSP regulations, Colorado selected and implemented a transfer candidate before an APD could be prepared and approved. Development costs are available in the CAFSS enhancements APD.

Total actual development costs for CAFSS enhancements, which included the claims and monthly reporting components, was approximately $2 million. Table 7.1 presents actual expenditures that occurred between 1984 and 1987. The CAFSS enhancements component was completely implemented by June 30, 1987.

**Table 7.1   CAFSS Enhancements Component Actual Development
Expenditures by Fiscal Year[4]**

FY	FY TOTAL	FFP AMOUNT AT 75%
1984	$35,518	$26,639
1985	654,863	491,147
1986	928,140	696,105
1987	412,874	309,656
Total	**$2,031,395**	**$1,523,546**

7.1.1   CAFSS Enhancements Component Development History

The CAFSS enhancements component was developed by transferring and modifying North Carolina's claim system. All of the system modifications were done by in-house automatic data processing (ADP) personnel.

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[4] Source: APDU December 18, 1987.

The development effort between fiscal years 1984 and 1987 was divided into five tasks and covered the following periods:

- Preliminary Study - 12/01/84 through 06/30/85
- System Design - 02/02/85 through 03/01/86
- Programming Phase - 07/01/85 through 01/31/87
- Testing Phase - 07/01/85 through 10/01/86
- Implementation - 01/31/87 through 06/30/87

7.1.2 Major Development Cost Components

The two most significant components of the CAFSS enhancements component development cost were personnel and hardware/software. No material contractor costs were incurred during the development phase. Table 7.2 provides a summary of development costs and corresponding FNS cost at 75 percent Federal financial participation (FFP). The following sections provide specific detail on personnel and hardware development costs.

Table 7.2 CAFSS Enhancements Component Actual Development Expenditures by Cost Component[5]

CAFSS COST COMPONENT	TOTAL ACTUAL EXPENDITURE	FNS COST AT 75% FFP
Personnel	$1,074,729	$806,047
Hardware/Software	669,819	502,364
GGCC Charges	199,082	149,312
Miscellaneous ADP	87,765	65,824
Total	**$2,031,395**	**$1,523,546**

7.1.2.1 Personnel

Total development cost resulting from time charged by CDSS personnel was approximately $997,461 for the first phase of development and $77,268 for personnel costs related to the IEVS extension, a major enhancement to the system. Specific personnel costs which total $997,461 are documented in Table 7.3.

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[5] Source: memo from CDSS to FNS-MPRO dated 11/5/86.

7.2   Operational Costs

CAFSS operational costs are divided into the following cost components:

- Personnel: includes direct and fringe benefits for the 15 FTEs assigned to CAFSS.

- Equipment: includes the maintenance and depreciation of terminals, printers, and other peripheral devices included in CAFSS and $35,000 in replacement equipment for CAFSS.

- GGCC Billings: includes charges for the use of the State operated computer center; the billings are based on transactions processed and resources used multiplied by a specific unit rate for each transaction billing unit.

- Other/Indirect: includes postage for FSP notices and other items such as travel, telephones, supplies, training, and indirect costs.

- County Data Processing: includes the cost of staff, equipment, and software used by the counties to run the CAFSS system.

In FY 1992, the total of these costs was $2,049,227 before applying FFP. Table 7.4 provides the specific amounts for these categories. The actual amounts recorded on the SF-269 for ADP operations for the first and second quarters of FY 93 were $358,039 and $332,054 respectively, for a total of $690,093 before applying FFP.

Table 7.4   CAFSS Operational Costs by Cost Component

CAFSS COST COMPONENT	TOTAL ACTUAL EXPENDITURE
County Costs	
County ADP	$320,678
State ADP Costs	
Personnel	706,585
Equipment	108,800
GGCC Billings	430,851
Other / Indirect	482,313
Total	**$2,049,227**

7.2.1 Cost Per Case

Based on the CAFSS operating costs for 1992, $2,049,227, the monthly FNS share of costs was calculated to be $170,768. The cost per case per month -- based on a monthly participation of 103,349 food stamp households -- was $1.65.

7.2.2 CAFSS Operational Cost Control Measures and Practices

All CAFSS expenditures are recorded in the Colorado Financial Reporting System (COFRS). This system records expenditures by grant, appropriation, organization, and object code. Detailed financial information is maintained on the General Ledger and Grant Budget Ledger (GBL).

GBL is designed to account for Federal programs, by fiscal year, by using account codes and other formats which facilitate the preparation of Federal reports. The coding structure also defines each program and account as direct, indirect, or special allocation cost center.

7.3 Cost Allocation Methodologies

This section describes the methodology that was used to allocate CAFSS development costs as well as the current method used to allocate the FNS share of ADP operational cost, which is reported on SF-269.

7.3.1 Historical Overview of Development Cost Allocation Methodology

Since the CAFSS claims component was developed specifically for FSP, development expenditures were 100 percent allocated to FNS and were funded at the enhanced rate of 75 percent.

7.3.2 Operational Cost Allocation Methodology

Costs are assigned to a direct, special allocation or to an indirect cost center in COFRS prior to being allocated. The GBL coding system identifies the type of cost center for each cost using the following numbering scheme:

1XXX -	Indirect Cost Centers/Departmental Overhead
18XX -	Computer Billings
2XXX -	Contracts
3XXX -	Costs to be Distributed
4XXX -	Special Allocations
5XXX -	Applied Indirect Rate
6XXX -	State Only - Veterans, Other
7XXX -	Staff Development
8XXX -	Federal Revenue Worksheet

The second, third, and fourth digits are determined by the program accountants who assign cost centers to expenditures.

7.3.3   CAFSS Cost Allocation Mechanics

This section describes the cost allocation process for ADP operational cost components and the mechanics for preparing the SF-269.

7.3.3.1   Personnel Costs

As noted in Table 7.4, personnel costs compose a significant portion of CAFSS operational costs. The rates and hours of personnel are recorded using a database system called Microman Time Reporting (MTR). MTR tracks the time/cost spent by FSP-funded staff on CAFSS related tasks as well as the time/cost that other systems' staff charge to FSP. In the latter case, FSP receives a credit if FSP-funded staff charged time to other systems and a charge if other systems' staff charged time to FSP. Charges and credits for each system are then "spread" to the appropriate program in a spreadsheet. This spreadsheet is forwarded to the accounting division so that the personnel costs can be entered into COFRS via journal vouchers. The costs will be accumulated in COFRS under GBL code, F157 (FSP) with object code 1110 (Personnel Services).

7.3.3.2   GGCC Billings

GGCC charges are charged directly to FSP and reported on the *GGCC YTD Billing Detail Report*. Schedule 12 billing and invoice category codes are used to track detailed costs on this report. These costs are entered into COFRS via journal vouchers and appear under GBL, F157 and object code, 3115.

7.3.3.3   Indirect Costs

Costs associated with departmental administrative activities are assigned to indirect cost centers. The costs which are accumulated under these cost centers are then allocated to program pools using appropriate allocation bases.

An indirect cost rate is then developed for each indirect program pool. The rate is determined by dividing the total indirect cost allocated to the pool by the allowable salaries, wages, and benefits of the program(s) assigned to the pool. The indirect rate is applied to each program in the pool by multiplying the rate by the personnel/salaries cost accumulated in the GBL.

7.3.3.4 Preparing the SF-269

The SF-269 worksheet facilitates the preparation of the actual report by identifying the detailed amounts which are added together to arrive at the total which is transferred to the appropriate column. For example, each amount which makes up ADP operations has a "7" next to it, which corresponds to the 7th column (ADP OPER) on the SF-269.

CAFSS operational costs which are directly charged to FSP are accumulated under GBL, F157 and shown on the COFRS *Grant Revenues and Obligations by Month and Year-to-Date* report. The total on this report is divided into year-to-date (YTD) personnel/services costs and YTD other costs on the spreadsheet. The object codes identify to which category the detailed cost belongs.

The total amounts for these items from the prior quarter are subtracted from the YTD total to arrive at the amounts for the current quarter. The indirect rate, previously calculated as in section 7.3.3.3, is multiplied by the personnel/services costs to arrive at the amount of indirect cost. Finally, the personnel services cost plus indirect cost plus other costs equals the total recorded on the SF-269 under the ADP OPER column.

Generally, for all other SF-269 columns, direct State administrative charges to FSP are obtained from the *Grant Revenues and Obligations by Month and Year-to-Date* and county costs are obtained from the *Federal Revenue Worksheet*.

The *Federal Revenue Worksheet* is an automated worksheet which distributes county administrative costs from cost pools based on staff assignments, time sheets, random moment sampling (RMS), and other appropriate bases per a Federally approved cost allocation plan. As a result of the distributions, an automated journal voucher is created which records the appropriate costs to each program in GBL.

The costs are then extracted from GBL and recorded on the SF-269 worksheet. Detailed amounts for each column are added together to arrive at the actual total which is reported on the SF-269.

APPENDIX A

STATE OF COLORADO

EXHIBITS

Exhibit A-2.1
Response to Regulatory Changes

Code	Regulation	Provision	Federally-Required Implementation Date	Implemented on Time (Y/N)?	Computer Programming Changes Required (Y/N)?	Changes to State Policy/ Legislation Required (Y/N)?
1.1	1: Mickey Leland Memorial Domestic Hunger Relief Act	1: Excludes as income State or local GA payments to HHS provided as vendor payments. 273.9(c)(1)(ii)(F)	8/1/91	N	N	N
1.2	1: Mickey Leland Memorial Domestic Hunger Relief Act	2: Excludes from income annual school clothing allowance however paid. 273.9(c)(5)(i)(F)	8/1/91	N	N	N
1.3	1: Mickey Leland Memorial Domestic Hunger Relief Act	3: Excludes as resource for Food Stamp purposes, household resources exempt by Public Assistance (PA) and SSI in mixed household. 273.8(e)(17)	2/1/92*	Y	N	Y
1.4	1: Mickey Leland Memorial Domestic Hunger Relief Act	4: State agency shall use a standard estimate of shelter expense for households with homeless members. 273.9(d)(5)(i)	2/1/92*	Y	N	Y
2.1	2: Administrative Improvement & Simplification Provisions of the Hunger Prevention Act	1: Extended resource exclusion of farm property and vehicles. 273.8(e)(5),etc.	7/1/89	Y	N	N/A
2.2	2: Administrative Improvement & Simplification Provisions of the Hunger Prevention Act	2: Combined initial allotment under normal time frames. 274.2(b)(2)	1/1/90	Y	Y	Y
2.3	2: Administrative Improvement & Simplification Provisions of the Hunger Prevention Act	3: Combined initial allotment under expedited service time frames. 274.2(b)(3)	1/1/90	Y	Y	Y

Exhibit A-2.1
Response to Regulatory Changes

Code	Regulation	Provision	Federally-Required Implementation Date	Implemented on Time (Y/N)?	Computer Programming Changes Required (Y/N)?	Changes to State Policy/ Legislation Required (Y/N)?
3.1	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	1: Exclusion of job stream migrant vendor payments. 273.9(c)(1)(ii)	9/1/88	Y	N	Y
3.2	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	2: Exclusion of advance earned income tax credit payments. 273.9(c)(14)	1/1/89*	Y	N	Y
3.3	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	3: Increase dependent care deductions. 273.9(f)(4), etc.	10/1/88	Y	Y	Y
3.4	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	4: Eliminate migrant initial month proration. 273.10(a)(1)(ii)	9/1/88	Y	Y	Y
4.1	4: Issuance	1: Mail issuance must be staggered over at least ten days. 274.2(c)(1)	4/1/89	Y	Y	Y
4.2	4: Issuance	2: Limitation on the number of replacement issuances. 274.6(b)(2)	10/1/89	Y	Y	Y
4.3	4: Issuance	3: Destruction of unusable coupons within 30 days. 274.7(f)	4/1/89	Y	N	Y

* These dates were changed after the State completed this form and the site visit took place; therefore, the responses to these particular regulatory changes may be inaccurate.

Exhibit A-6.1
State of Colorado
Hardware Inventory

Component	Make	Acquisition Method	Number/ Features
CPU			
GX8420	Hitachi	Purchase	512 MB, 200 MIPS
DISK			
3380	IBM	Purchase	307.5 GB
3380	Memorex	Purchase	307.5 GB
3380	STK	Purchase	307.5 GB
3380/3390	HDS	Purchase	307.5 GB
TAPE			
4674	STK	Purchase	Drives (4)
4480		Purchase	Cartridge Drives (32)
4480		Purchase	Cartridge Drives on 2 LSM silos (24)
PRINTERS			
4050 laser	Xerox	Purchase	(1)
4090 laser	Xerox	Purchase	(1)
4780 page	Memorex	Purchase	(6)
High Speed Band	Stk	Purchase	(4)
FRONT ENDS			
3745	IBM	Purchase	7269 term.
REMOTE EQUIPMENT			
Workstations			

Table A-7.1 Cost Comparisons for Development Alternatives
(Source: CBMS Cost-Benefit Analysis Report, 5/25/93)

COST COMPONENT	DEVELOPMENT COSTS		FIVE YEAR OPERATIONAL COSTS		COMBINED DEVELOPMENT AND OPERATIONAL COSTS		
	DISTRIBUTED	CENTRALIZED	DISTRIBUTED	CENTRALIZED	DISTRIBUTED	CENTRALIZED	DIFF.
DIRECT PERSONNEL	$ 3,910,961	$ 3,960,076	$14,195,250	$11,832,750	$18,106,211	$15,792,826	$ 2,313,385
CONTRACTOR ADP SERVICES	15,367,223	14,974,263	0	0	15,367,223	14,974,263	392,960
PURCHASE / LEASE HARDWARE	4,815,378	1,800,000	11,389,799	26,049,762	16,205,177	27,849,762	11,644,585
PURCHASE / LEASE SOFTWARE	429,810	155,880	431,636	104,120	861,446	260,000	601,446
ADP SUPPLIES	444,938	46,000	854,300	60,000	1,299,238	106,000	1,193,238
MISCELLANEOUS ADP EXPENSE	528,780	391,680	1,465,898	1,327,850	1,994,678	1,719,530	275,148
TRAINING COSTS	3,560,438	3,324,755	1,325,947	1,319,280	4,886,385	4,644,035	242,350
OVERHEAD	1,274,187	1,285,633	3,880,299	3,288,008	5,154,486	4,573,641	580,845
TOTAL PROJECT COSTS	$30,331,715	$25,938,287	$33,543,129	$43,981,770	$63,874,844	$69,920,057	$(6,045,213)
PROGRAMS' SHARE							
AFDC (42.55%)	$12,906,145	$11,036,741	$14,272,601	$18,714,243	$27,178,746	$29,750,984	$(2,572,238)
FSP (27.65%)	8,386,719	7,171,936	9,274,,675	12,160,959	17,661,394	19,332,896	(1,671,501)
MA (24.95%)	7,567,763	6,471,603	8,369,011	10,973,452	15,936,774	17,445,054	(1,508,281)
STATE ONLY (4.85%)	1,471,088	1,258,007	1,626,842	2,133,116	3,097,930	3,391,123	(293,193)

APPENDIX B

STATE OF COLORADO

ANALYSIS OF OPERATOR USER SATISFACTION SURVEYS

OVERVIEW

This appendix presents the results of the Operational Level User Satisfaction Survey. Frequency counts of responses to all applicable items on the survey are included, grouped by the topic covered by the item. The results for the items covering each topic are summarized as well.

The responses to the Operational Level User Satisfaction Survey represent the perceptions of eligibility workers (EWs) in Colorado. In other words, these responses do not necessarily represent a "true" description of the situation in Colorado. For example, the results presented regarding the response time of the system reflect the workers' perceptions about response time, not an objective measure of the actual speed of the response.

Description of the Sample

The following table summarizes the potential population size and the final size of the sample who responded.

Number of EWs in Colorado	Number Selected to Receive Survey	Percentage Selected
570	63	11.1%
	Number Responding to Survey	Response Rate
	29	46.0%

The eligibility workers selected to receive the survey were selected randomly so their perceptions would be representative of EWs in Colorado. The number of responses (29), however, is low and produces a small sample that may not be representative of the randomly selected group.

Summary of Findings

Most of the respondents are satisfied with the computer system in Colorado. They generally find it provides acceptable response time, availability, accuracy, and ease of use. Nevertheless, the responses indicate some workers have problems with particular features of the system. A large majority of the workers think that the system is a great help to them, and few think it causes stress.

Colorado's current system has been operational in most of the State since 1985, but the system was not implemented in one county until 1993. Survey instructions requested that respondents not complete questions comparing the current and previous systems if the current system was implemented more than five years ago. Questions comparing the current and previous systems, which should have been answered only by workers in the recently implemented county, have

low response rates. The small number of responses makes it difficult to generalize workers' perceptions for these questions.

SYSTEM CHARACTERISTICS

Response Time

What is the quality of overall system response time?

	Number of Respondents	Percentage of Respondents(%)
Good	20	69.0
Excellent	9	31.0

What is the quality of system response time during peak periods?

	Number of Respondents	Percentage of Respondents(%)
Poor	7	24.1
Good	17	58.6
Excellent	5	17.2

How often is the system response time too slow?

	Number of Respondents	Percentage of Respondents(%)
Rarely	12	41.4
Sometimes	14	48.3
Often	3	10.3

For the most part, EWs are pleased with system response time. All eligibility workers surveyed think that overall system response time is excellent or good, and more than 75 percent of the workers believe that response time is excellent or good during peak processing periods. Nearly 60 percent of EWs, however, think that response time sometimes or often is too slow.

Availability

How often is the system available when you need to use it?

	Number of Respondents	Percentage of Respondents(%)
Sometimes	5	17.2
Often	24	82.8

How often is the system down?

	Number of Respondents	Percentage of Respondents(%)
Rarely	14	48.3
Sometimes	11	37.9
Often	4	13.8

EWs believe that system availability generally is acceptable. Over 80 percent of the workers surveyed believe that the system often is available when they need to use it, but just over 50 percent also think that the system is sometimes or often down. The system downtime, however, does not seem to be intrusive enough to detract from the perception that the system generally is available.

Accuracy

What is the quality of the information in the system?

	Number of Respondents	Percentage of Respondents(%)
Poor	2	7.1
Good	21	75.0
Excellent	5	17.9

How often is a case terminated in error?

	Number of Respondents	Percentage of Respondents(%)
Rarely	25	86.2
Sometimes	4	13.8

How often is eligibility incorrectly determined?

	Number of Respondents	Percentage of Respondents(%)
Rarely	28	96.6
Sometimes	1	3.4

How often is the system's data out-of-date?

	Number of Respondents	Percentage of Respondents(%)
Rarely	23	82.1
Sometimes	5	17.9

Under the new (current) system, how difficult or easy is it to calculate benefit levels accurately?

	Number of Respondents	Percentage of Respondents(%)
About the same	2	40.0
Easier	3	60.0

The eligibility workers generally think that the system's data and computations are accurate. Almost 93 percent of EWs believe the quality of the data in the system is good or excellent. Significant majorities report that cases rarely are terminated in error, eligibility rarely is determined incorrectly, and the system rarely contains out-of-date information.

Ease of Use

How often do you have difficulty obtaining necessary information from the system?

	Number of Respondents	Percentage of Respondents(%)
Rarely	21	72.4
Sometimes	7	24.1
Often	1	3.4

How often do you have difficulty learning to use the system?

	Number of Respondents	Percentage of Respondents(%)
Rarely	22	75.9
Sometimes	6	20.7
Often	1	3.4

How often do you have difficulty tracking receipt of monthly reporting forms?

	Number of Respondents	Percentage of Respondents(%)
Rarely	10	71.4
Sometimes	4	28.6

How often do you have difficulty automatically terminating benefits for failure to file?

	Number of Respondents	Percentage of Respondents(%)
Rarely	16	88.9
Sometimes	2	11.1

How often do you have difficulty generating adverse action notices?

	Number of Respondents	Percentage of Respondents(%)
Rarely	21	77.8
Sometimes	4	14.8
Often	2	7.4

How often do you have difficulty generating warning notices?

	Number of Respondents	Percentage of Respondents(%)
Rarely	17	73.9
Sometimes	5	21.7
Often	1	4.3

How often do you have difficulty determining monthly reporting status?

	Number of Respondents	Percentage of Respondents(%)
Rarely	13	76.5
Sometimes	4	23.5

How often do you have difficulty restoring benefits?

	Number of Respondents	Percentage of Respondents(%)
Rarely	28	96.6
Often	1	3.4

How often do you have difficulty identifying recipients already known to the State?

	Number of Respondents	Percentage of Respondents(%)
Rarely	24	82.8
Sometimes	5	17.2

How often do you have difficulty updating registration data?

	Number of Respondents	Percentage of Respondents(%)
Rarely	22	91.7
Sometimes	2	8.3

How often do you have difficulty updating eligibility and benefit information from recertification data?

	Number of Respondents	Percentage of Respondents(%)
Rarely	27	93.1
Sometimes	2	6.9

How often do you have difficulty identifying cases which are overdue for recertification?

	Number of Respondents	Percentage of Respondents(%)
Rarely	26	92.9
Sometimes	2	7.1

How often do you have difficulty monitoring the status of all hearings?

	Number of Respondents	Percentage of Respondents(%)
Rarely	12	75.0
Sometimes	2	12.5
Often	2	12.5

How often do you have difficulty tracking outstanding verifications?

	Number of Respondents	Percentage of Respondents(%)
Rarely	13	56.5
Sometimes	8	34.8
Often	2	8.7

How often do you have difficulty automatically notifying households of case actions?

	Number of Respondents	Percentage of Respondents(%)
Rarely	24	82.8
Sometimes	4	13.8
Often	1	3.4

How often do you have difficulty notifying recipients that recertification is required?

	Number of Respondents	Percentage of Respondents(%)
Rarely	24	85.7
Sometimes	3	10.7
Often	1	3.6

How often do you have difficulty identifying cases making payments through recoupment?

	Number of Respondents	Percentage of Respondents(%)
Rarely	15	55.6
Sometimes	10	37.0
Often	2	7.4

How often do you have difficulty identifying error prone cases?

	Number of Respondents	Percentage of Respondents(%)
Rarely	13	52.0
Sometimes	6	24.0
Often	6	24.0

How often do you have difficulty identifying cases involving suspected fraud?

	Number of Respondents	Percentage of Respondents(%)
Rarely	14	53.8
Sometimes	7	26.9
Often	5	19.2

How often do you have difficulty assigning new case numbers?

	Number of Respondents	Percentage of Respondents(%)
Rarely	19	79.2
Sometimes	4	16.7
Often	1	4.2

Under the new (current) system, how difficult or easy is it to determine eligibility?

	Number of Respondents	Percentage of Respondents(%)
About the same	3	60.0
Easier	2	40.0

Under the new (current) system, how difficult or easy is it to track receipt of monthly reporting forms?

	Number of Respondents	Percentage of Respondents(%)
More Difficult	1	20.0
About the same	3	60.0
Easier	1	20.0

Under the new (current) system, how difficult or easy is it to automatically terminate benefits for failure to file?

	Number of Respondents	Percentage of Respondents(%)
About the same	4	80.0
Easier	1	20.0

Under the new (current) system, how difficult or easy is it to generate warning notices?

	Number of Respondents	Percentage of Respondents(%)
About the same	4	80.0
Easier	1	20.0

Under the new (current) system, how difficult or easy is it to determine monthly reporting status?

	Number of Respondents	Percentage of Respondents(%)
About the same	4	80.0
Easier	1	20.0

Under the new (current) system, how difficult or easy is it to restore benefits?

	Number of Respondents	Percentage of Respondents(%)
More Difficult	1	20.0
About the same	1	20.0
Easier	3	60.0

Responses to these questions indicate that a majority of EWs find the system easy to use for each function discussed. Nevertheless, a significant proportion (approximately 45 percent) of workers sometimes or often have problems with tracking outstanding verifications and identifying specific types of cases (e.g., cases making payments through recoupment, error prone cases, and cases involving suspected fraud).

Data are provided comparing the current and previous systems; however, the small number of responses precludes the use of the responses for making generalizations about the population. Nevertheless, among the EWs who answered these questions, the general impression is that the degree of difficulty associated with performing most functions in the current and previous systems is similar.

FOOD STAMP PROGRAM NEEDS

Worker Satisfaction Levels

How often is the system a great help to you in your job?

	Number of Respondents	Percentage of Respondents(%)
Rarely	1	3.4
Sometimes	3	10.3
Often	25	86.2

How often is the system an added stress in your job?

Under the new (current) system, how pleasant do you find your work?

	Number of Respondents	Percentage of Respondents(%)
Less	1	20.0
About the same	3	60.0
More	1	20.0

Under the new (current) system, how stressful do you find your work?

	Number of Respondents	Percentage of Respondents(%)
Less	1	20.0
About the same	4	80.0

Under the new (current) system, how much are you able to get done?

	Number of Respondents	Percentage of Respondents(%)
Less	2	40.0
About the same	1	20.0
More	2	40.0

Under the new (current) system, how efficient are you in your work?

	Number of Respondents	Percentage of Respondents(%)
About the same	3	60.0
More	2	40.0

How do you rate the new (current) system in comparison to the previous system?

	Number of Respondents	Percentage of Respondents(%)
Worse	2	50.0
About the same	1	25.0
Better	1	25.0

Over 95 percent of eligibility workers think that the system often is a great help in their jobs, and under 25 percent of the workers believe that the system contributes to job-related stress. This finding is corroborated by the large majority (nearly 90 percent) of EWs who believe that the system usually is more of a help than a problem.

Although the number of responses to the questions comparing the previous and new systems is too small to support inferences, the individuals' responses indicate that in many areas, the level of worker satisfaction was similar under the previous and current systems. Two out of five workers, however, find their work less satisfying under the new system and feel that they are less productive.

Client Service

How often is expedited service difficult to achieve?

	Number of Respondents	Percentage of Respondents(%)
Rarely	24	85.7
Sometimes	3	10.7
Often	1	3.6

How often do you have difficulty providing expedited services?

	Number of Respondents	Percentage of Respondents(%)
Rarely	24	85.7
Sometimes	4	14.3

Under the new (current) system, how difficult or easy is it to interview a client in a timely manner?

	Number of Respondents	Percentage of Respondents(%)
About the same	4	80.0
Easier	1	20.0

Under the new (current) system, how would you rate the number of trips the client has to make to obtain benefits?

	Number of Respondents	Percentage of Respondents(%)
More	2	40.0
About the same	2	40.0
Fewer	1	20.0

Under the new (current) system, how would you rate the amount of time a client has to wait in the office?

	Number of Respondents	Percentage of Respondents(%)
More	1	20.0
About the same	2	40.0
Less	2	40.0

Under the new (current) system, how would you rate the amount of paperwork demanded of the client?

	Number of Respondents	Percentage of Respondents(%)
About the same	4	80.0
Less	1	20.0

Over 85 percent of EWs surveyed feel that there are few problems associated with providing expedited service to clients.

Based on the small sample comparing the current and previous systems, client service is about the same under the current and previous systems.

Fraud and Errors

Under the new (current) system, how difficult or easy is it to collect overpayments?

	Number of Respondents	Percentage of Respondents(%)
More Difficult	1	20.0
About the same	3	60.0
Easier	1	20.0

Under the new (current) system, how many errors are made?

	Number of Respondents	Percentage of Respondents(%)
More	1	20.0
About the same	3	60.0
Fewer	1	20.0

Under the new (current) system, how many instances of fraud get by?

	Number of Respondents	Percentage of Respondents(%)
About the same	2	40.0
Fewer	3	60.0

All the questions in this category compare the current and previous systems; therefore, the responses are limited to five EWs. While three of five believe that the level of difficulty associated with collecting overpayments and the number of errors are the same for the current and previous systems, the same number think that fewer fraud cases go undetected with the new system.

APPENDIX C

STATE OF COLORADO

ANALYSIS OF MANAGERIAL USER SATISFACTION SURVEYS

OVERVIEW

This appendix presents the results of the Managerial Level User Satisfaction Survey. Frequency counts of responses to all applicable items on the survey are included, grouped by the topic covered by the item. The results for the items covering each topic are summarized as well.

The responses to the Managerial Level User Satisfaction Survey represent the perceptions of eligibility workers (EW) supervisors in Colorado. In other words, these responses do not necessarily represent a "true" description of the situation in Colorado. For example, the results presented regarding the response time of the system reflect the supervisors' perceptions about response time, not an objective measure of the actual speed of the response.

Description of the Sample

The following table summarizes the potential population size and the final size of the sample who responded.

Number of EW Supervisors in Colorado	Number Selected to Receive Survey	Percentage Selected
65	30	46.2%
	Number Responding to Survey	Response Rate
	14	46.7%

The eligibility worker supervisors selected to receive the survey were selected randomly so their perceptions would be representative of EW supervisors in Colorado. The response rate, however, is low. This suggests that the responses provided may not be representative of the randomly selected group.

Summary of Findings

Most of the EW supervisors regard the system positively and believe that it helps them in their jobs. The vast majority of EW supervisors report that overall response time, system availability, accuracy, and ease of use are good. For each specific question, significant majorities of EW supervisors believe that the system supports them in an acceptable manner.

Colorado's current system has been operational in most of the State since 1985, but the system was not implemented in one county until 1993. Survey instructions requested that respondents not complete questions comparing the current and previous systems if the current system was implemented more than five years ago. Questions comparing the current and previous systems, which should have been answered only by EW supervisors in the recently implemented county,

have low response rates. The small number of responses makes it difficult to generalize supervisors' perceptions for these questions.

SYSTEM CHARACTERISTICS

Response Time

What is the quality of overall system response time?

	Number of Respondents	Percentage of Respondents
Poor	1	7.1
Good	8	57.1
Excellent	5	35.7

What is the quality of system response time during peak periods?

	Number of Respondents	Percentage of Respondents
Poor	1	7.1
Good	11	78.6
Excellent	2	14.3

How often is the system response time too slow?

	Number of Respondents	Percentage of Respondents
Rarely	9	64.3
Sometimes	5	35.7

EW supervisors in Colorado are satisfied with the system's response time. With one exception, the supervisors surveyed think that both overall and peak system response time are good or excellent. The majority of the supervisors feel that slow response time is rarely a problem.

Availability

How often is the system available when you need to use it?

	Number of Respondents	Percentage of Respondents
Often	14	100.0

How often is the system down?

	Number of Respondents	Percentage of Respondents
Rarely	10	71.4
Sometimes	4	28.6

EW supervisors think that system availability is good. All respondents believe that the system often is available when needed. The majority of EW supervisors also perceive that the system rarely is down.

Accuracy

What is the quality of the information in the system?

	Number of Respondents	Percentage of Respondents
Poor	1	7.1
Good	9	64.3
Excellent	4	28.6

Under the new (current) system, how difficult or easy is it to calculate benefit levels accurately?

	Number of Respondents	Percentage of Respondents
More Difficult	1	50.0
Easier	1	50.0

EW supervisors believe that system accuracy is good; however, there is not enough comparative data to determine if the current system calculates benefit levels more or less accurately than the previous system. Over 92 percent of EW supervisors feel that the quality of the system's data is good or excellent.

Ease of Use

How often do you have difficulty obtaining necessary information from the system?

	Number of Respondents	Percentage of Respondents
Rarely	11	78.6
Sometimes	2	14.3
Often	1	7.1

How often do you have difficulty learning to use the system?

	Number of Respondents	Percentage of Respondents
Rarely	11	78.6
Sometimes	3	21.4

How often do you have difficulty generating adverse action notices?

	Number of Respondents	Percentage of Respondents
Rarely	11	78.6
Sometimes	3	21.4

How often do you have difficulty generating warning notices?

	Number of Respondents	Percentage of Respondents
Rarely	7	70.0
Sometimes	2	20.0
Often	1	10.0

How often do you have difficulty restoring benefits?

	Number of Respondents	Percentage of Respondents
Rarely	12	85.7
Sometimes	2	14.3

Under the new (current) system, how difficult or easy is it to determine eligibility?

	Number of Respondents	Percentage of Respondents
About the same	1	50.0
Easier	1	50.0

Under the new (current) system, how difficult or easy is it to generate warning notices?

	Number of Respondents	Percentage of Respondents
About the same	1	50.0
Easier	1	50.0

Under the new (current) system, how difficult or easy is it to restore benefits?

	Number of Respondents	Percentage of Respondents
About the same	1	50.0
Easier	1	50.0

EW supervisors feel that the system is relatively easy to use. For each of the functions discussed, at least 70 percent of supervisors indicate that it is rarely difficult to perform the function.

The two responses to the questions comparing the current and previous system cannot be generalized. Within the sample, one respondent feels that it is easier to perform each function with the current system, and one respondent believes the level of difficulty is similar with the current and previous systems.

FOOD STAMP PROGRAM NEEDS

Supervisor Satisfaction Levels

How often is the system a great help to you in your job?

	Number of Respondents	Percentage of Respondents
Sometimes	4	28.6
Often	10	71.4

How often is the system an added stress in your job?

	Number of Respondents	Percentage of Respondents
Rarely	11	78.6
Sometimes	2	14.3
Often	1	7.1

Under the new (current) system, how satisfying do you find your work?

	Number of Respondents	Percentage of Respondents
Less	1	50.0
More	1	50.0

Under the new (current) system, how pleasant do you find your work?

	Number of Respondents	Percentage of Respondents
Less	1	50.0
More	1	50.0

Under the new (current) system, how stressful do you find your work?

	Number of Respondents	Percentage of Respondents
Less	1	50.0
More	1	50.0

Under the new (current) system, how much work are you able to get done?

	Number of Respondents	Percentage of Respondents
About the same	1	50.0
More	1	50.0

Under the new (current) system, how efficient are you in your work?

	Number of Respondents	Percentage of Respondents
Less	1	50.0
More	1	50.0

How do you rate the new (current) system in comparison to the previous system?

	Number of Respondents	Percentage of Respondents
Worse	1	50.0
Better	1	50.0

A significant majority of EW supervisors feel that the system often is a great help in performing their jobs and seldom is an added stress.

The questions comparing the current and previous systems provide responses from only two workers. Their individual perceptions vary in many areas.

Management Needs

What is the quality of the reports produced by the system?

	Number of Respondents	Percentage of Respondents
Good	11	78.6
Excellent	3	21.4

What is the quality of the support provided by the technical staff supporting the automated system?

	Number of Respondents	Percentage of Respondents
Good	10	71.4
Excellent	4	28.6

How often do you have difficulty making mass changes to the system?

	Number of Respondents	Percentage of Respondents
Rarely	7	87.5
Often	1	12.5

How often do you have difficulty meeting Federal reporting requirements?

	Number of Respondents	Percentage of Respondents
Rarely	10	100.0

Under the new (current) system, how efficient are the people you supervise?

	Number of Respondents	Percentage of Respondents
Less	1	50.0
More	1	50.0

Under the new (current) system, how difficult or easy is it to make mass changes to the system?

	Number of Respondents	Percentage of Respondents
About the same	1	50.0
Easier	1	50.0

Under the new (current) system, how difficult or easy is it to evaluate local office efficiency?

	Number of Respondents	Percentage of Respondents
About the same	1	50.0
Easier	1	50.0

EW supervisors agree that the system meets management needs. All supervisors believe that the quality of reports produced by the system and technical staff support is good to excellent. A significant majority reports rarely having problems making mass changes to the system. All of the supervisors feel that it is rarely difficult to meet Federal reporting requirements.

The questions comparing the current and previous systems provide responses from only two workers, and their individual perceptions vary in many areas.

Client Service

Under the new (current) system, how difficult or easy is it to interview a client in a timely manner?

	Number of Respondents	Percentage of Respondents
Easier	1	100.0

Under the new (current) system, how would you rate the services received by the client?

	Number of Respondents	Percentage of Respondents
Worse	1	50.0
Better	1	50.0

Under the new (current) system, how do you think the average client is being served?

	Number of Respondents	Percentage of Respondents
Worse	1	50.0
Better	1	50.0

All questions in this category compare the current and previous systems; therefore, the response rate is too low to provide any information beyond individuals' perceptions. The responses do not provide any consensus about client service under the current system.

Fraud and Errors

Under the new (current) system, how difficult or easy is it to collect overpayments?

	Number of Respondents	Percentage of Respondents
Easier	1	100.0

Under the new (current) system, how many errors are made?

	Number of Respondents	Percentage of Respondents
More	1	50.0
Less	1	50.0

Under the new (current) system, how many false claims are caught?

	Number of Respondents	Percentage of Respondents
More	1	100.0

Under the new (current) system, how many instances of fraud get by?

	Number of Respondents	Percentage of Respondents
Fewer	1	100.0

All questions in this category compare the current and previous systems; therefore, the response rate is too low to provide any information beyond individuals' perceptions. The individuals' responses do not provide a clear picture regarding the number of errors made with the current system. For other questions, only one response is given; the perception is that the current system improves the ability to detect fraud and collect overpayments.

APPENDIX D

STATE SUPPLEMENTAL INFORMATION

The CBMS Cost Comparisons Development Alternatives table displayed below provides updated financial information provided by the State after the delivery of the draft State report. It is intended to replace table A-7.1 Cost Comparisons for Development Alternatives located in Appendix A.

COLORADO CBMS
COST COMPARISONS
DEVELOPMENT ALTERNATIVES

	DEVELOPMENT COSTS		FIVE YEAR OPERATIONS		COMBINED DEVELOPMENT AND OPERATIONS		
	DISTRIBUTED	CENTRALIZED	DISTRIBUTED	CENTRALIZED	DISTRIBUTED	CENTRALIZED	DIFFERENCE

DEVELOPMENT COSTS BY FEDERAL CATEGORY

	DISTRIBUTED	CENTRALIZED	DISTRIBUTED	CENTRALIZED	DISTRIBUTED	CENTRALIZED	DIFFERENCE
DIRECT PERSONNEL	3,910,961	3,960,076	14,195,250	11,832,750	18,106,211	15,792,826	2,313,385
CONTRACTOR ADP SERVICES	15,367,223	14,974,263	0	0	15,367,223	14,974,263	392,960
PURCHASE/LEASE HARDWARE	4,815,378	1,800,000	11,389,799	26,049,762	16,205,177	27,849,762	(11,644,585)
PURCHASE/LEASE SOFTWARE	429,810	155,880	431,636	104,120	861,446	260,000	601,446
ADP SUPPLIES	444,938	46,000	854,300	60,000	1,299,238	106,000	1,193,238
MISCELLANEOUS ADP EXPENSE	528,780	391,680	1,465,898	1,327,850	1,994,678	1,719,530	275,148
TRAINING COSTS	3,560,438	3,324,755	1,325,947	1,319,280	4,886,385	4,644,035	242,350
OVERHEAD	1,274,187	1,285,633	3,880,299	3,288,008	5,154,486	4,573,641	580,845
TOTAL DEVELOPMENTCOSTS	30,331,715	25,938,287	33,543,129	43,981,770	63,874,844	69,920,057	(6,045,213)
STATE ADP COSTS (EXHIBIT VIII-10, 1995 to 1997)	18,270,534	18,270,534			18,270,534	18,270,534	0
TOTAL PROJECT COSTS	48,602,249	44,208,821	33,543,129	43,981,770	82,145,378	88,190,591	(6,045,213)

ALLOCATIONS TO PROGRAMS

		DISTRIBUTED	CENTRALIZED	DISTRIBUTED	CENTRALIZED	DISTRIBUTED	CENTRALIZED	DIFFERENCE
AFDC	42.55%	20,680,257	18,810,853	14,272,601	18,714,243	34,952,858	37,525,096	(2,572,238)
Food Stamps	27.65%	13,438,522	12,223,739	9,274,675	12,160,959	22,713,197	24,384,698	(1,671,501)
Medicaid	24.95%	12,126,261	11,030,101	8,369,011	10,973,452	20,495,272	22,003,552	(1,508,281)
State Only	4.85%	2,357,209	2,144,128	1,626,842	2,133,116	3,984,051	4,277,244	(293,193)

STATE SHARE

		DISTRIBUTED	CENTRALIZED	DISTRIBUTED	CENTRALIZED	DISTRIBUTED	CENTRALIZED	DIFFERENCE
AFDC	50.00%	10,340,128	9,405,427	7,136,301	9,357,122	17,476,429	18,762,548	(1,286,119)
Food Stamps	50.00%	6,719,261	6,111,870	4,637,338	6,080,480	11,356,599	12,192,349	(835,751)
Medicaid	50.00%	6,063,131	5,515,050	4,184,505	5,486,726	10,247,636	11,001,776	(754,140)
State Only	100.00%	2,357,209	2,144,128	1,626,842	2,133,116	3,984,051	4,277,244	(293,193)
TOTAL STATE COSTS		25,479,729	23,176,474	17,584,985	23,057,443	43,064,714	46,233,917	(3,169,203)